Ultramicroscopy 39 (1991) 403–405
North-Holland

ultramicroscopy

Author index to volume 39

Abe, H., see Kinoshita 39 (1991) 205
Ai, R., M.I. Buckett, D. Dunn, T.S. Savage, J.P. Zhang and L.D. Marks, UHV microscopy of surfaces 39 (1991) 387
Alfredsson, V., see Terasaki 39 (1991) 238
Allen, C.W. and D.A. Smith, In situ study of effects of ion irradiation on solid-state crystallization of cobalt disilicide thin films 39 (1991) 222
Arai, S., see Kuroda 39 (1991) 58

Bando, Y., see Matsui 39 (1991) 8
Bovin, J.-O., see Terasaki 39 (1991) 238
Brito, M.E., see Nagakura 39 (1991) 254
Buckett, M.I., see Ai 39 (1991) 387

Dunn, D., see Ai 39 (1991) 387

Ezawa, T. and E. Wakai, Radiation-induced solute segregation in Al and Ni binary alloys under HVEM irradiation 39 (1991) 187

Fujimura, A., see Suzuki 39 (1991) 92
Fujita, H., K. Ura and H. Mori, Foreword to High-Voltage Electron Microscopy 39 (1991) xiii
Fujita, H., see Komatsu 39 (1991) 105
Fujita, H., see Okabayashi 39 (1991) 306
Fujita, H., see Nakayam 39 (1991) 329
Fujita, H., see Mori 39 (1991) 355
Fujita, H., Atom clusters – new applications of high-voltage electron microscopy "micro-laboratory" to materials science 39 (1991) 369
Fukumoto, K., see Kinoshita 39 (1991) 205

Goringe, M.J., Some aspects of HVEM in the study of materials 39 (1991) 100

Hama, T., see Inoko 39 (1991) 118
Hanamura, T., R. Uemori, M. Tanino and H. Morikawa, Dynamic observation of dislocation movement across twin boundaries in the lamellar structure of TiAl intermetallic compound 39 (1991) 86
Hashimoto, H., Y. Makita, Y. Yokota, T. Ikuta, M. Hashimoto and C.J.D. Hetherington, Observations on quick fluctuation of atom images of Si crystal lattice under 800 kV electron irradiation 39 (1991) 171
Hashimoto, M., see Hashimoto 39 (1991) 171
Hetherington, C.J.D., see Hashimoto 39 (1991) 171
Hidaka, Y., see Ohnuki 39 (1991) 197
Hiraga, K., see Shindo 39 (1991) 50
Hiraga, K., see Takeda 39 (1991) 180
Hirata, M., see Takeda 39 (1991) 180
Hirotsu, Y., see Nagakura 39 (1991) 254
Horiuchi, S., see Matsui 39 (1991) 8
Horiuchi, S., Y. Matsui, Y. Kitami, M. Yokoyama, S. Suehara, X.J. Wu, I. Matsui and T. Katsuta, Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. II. Applications to materials 39 (1991) 231
Hua, G.-C., see Takeda 39 (1991) 180
Hua, G.-C., see Oshima 39 (1991) 160

Ikeda, K., see Sumida 39 (1991) 313
Ikuta, T., see Hashimoto 39 (1991) 171
Inoko, F., T. Hama, M. Tagami and T. Yoshikawa, Grain boundary premelting in thin foils of deformed copper bicrystals 39 (1991) 118
Inui, H., A. Nakamura, M.H. Oh and M. Yamaguchi, High-resolution electron microscope study of lamellar boundaries in Ti-rich TiAl polysynthetically twinned crystals 39 (1991) 268
Isoda, S., S. Moriguchi, H. Kurata, T. Kobayashi and N. Uyeda, A new 1000 kV HREM for organic crystal study 39 (1991) 247

Jin, N.Y., see Seeger 39 (1991) 342
Jouffrey, B., Recent evolution of HVEM in France 39 (1991) 21

Kamino, T., see Saka 39 (1991) 110
Katsuta, T., see Matsui 39 (1991) 8
Katsuta, T., see Yoshida 39 (1991) 45
Katsuta, T., see Horiuchi 39 (1991) 231
Kifune, K., see Kitano 39 (1991) 279
Kimoto, K., see Tanaka 39 (1991) 395
Kinoshita, C., H. Abe, K. Fukumoto, K. Nakai and K. Shinohara, Accumulation and annihilation processes of cascades in metallic and nonmetallic crystals under irradiation with ions and/or electrons 39 (1991) 205
Kinoshita, C., see Tomokiyo 39 (1991) 213
Kinoshita, C., see Nakai 39 (1991) 361

Elsevier Science Publishers B.V.

Kiritani, M., History, present status and future of the contribution of high-voltage electron microscopy to the study of radiation damage and defects in solids 39 (1991) 135
Kiritani, M., see Takeda 39 (1991) 180
Kitami, Y., see Matsui 39 (1991) 8
Kitami, Y., see Horiuchi 39 (1991) 231
Kitano, Y. and K. Kifune, HREM study of disclinations in MgCd ordered alloy 39 (1991) 279
Kobayashi, T., see Isoda 39 (1991) 247
Komatsu, M. and H. Fujita, In situ investigations of plastic deformation and pseudoelasticity of zirconia ceramics 39 (1991) 105
Kurata, H., see Isoda 39 (1991) 247
Kuroda, K., C. Morita, S. Arai, N. Yokoi and H. Saka, Convergent beam electron diffraction in the high-voltage electron microscope with continuously variable reference voltage for lenses and alignments 39 (1991) 58
Kuroiwa, T., see Komokiyo 39 (1991) 213

Makita, Y., see Hashimoto 39 (1991) 171
Marks, L.D., see Ai 39 (1991) 387
Matsui, I., see Matsui 39 (1991) 8
Matsui, I., see Yoshida 39 (1991) 45
Matsui, I., see Horiuchi 39 (1991) 231
Matsui, Y., S. Horiuchi, Y. Bando, Y. Kitami, M. Yokoyama, S. Suehara, I. Matsui and T. Katsuta, Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. I. Instrumentation 39 (1991) 8
Matsui, Y., see Horiuchi 39 (1991) 231
Matsumura, S., T. Ohboshi, K. Oki and Y. Tomokiyo, High-voltage electron diffraction study of structure factors of Pd and Pt 39 (1991) 65
Matsunaga, A., see Nakai 39 (1991) 361
Mihama, K., see Tanaka 39 (1991) 395
Mitome, M. and K. Takayanagi, Anomalous surface structure of fine germanium particles 39 (1991) 382
Miyagawa, K., see Nagakura 39 (1991) 254
Mori, H., see Fujita 39 (1991) xiii
Mori, H., see Okabayashi 39 (1991) 306
Mori, H., see Yasuda 39 (1991) 321
Mori, H. and H. Fujita, Formation of non-equilibrium solid phases by high-energy electron irradiation 39 (1991) 355
Moriguchi, S., see Isoda 39 (1991) 247
Morikawa, H., see Hanamura 39 (1991) 86
Morita, C., see Kuroda 39 (1991) 58
Muto, S., see Takeda 39 (1991) 180

Nagakawa, J., see Suzuki 39 (1991) 92
Nagakura, S., Y. Hirotsu, J. Sasaki, K. Miyagawa, Y. Nakamura and M.E. Brito, Degradation of the high-T_c superconductor $YBa_3Cu_3O_{7-y}$ studied by high-resolution electron microscopy 39 (1991) 254
Naka, M., Aluminium/ceramic interface structure and its related properties 39 (1991) 128
Nakai, K., see Kinoshita 39 (1991) 205
Nakai, K., C. Kinoshita and A. Matsunaga, A study of amorphization and microstructural evolution of graphite under electron or ion irradiation 39 (1991) 361
Nakamura, A., see Inui 39 (1991) 268
Nakamura, Y., see Nagakura 39 (1991) 254
Nakata, Y., T. Tadaki and K. Shimizu, Evaluation of accuracy in the ALCHEMI method 39 (1991) 72
Nakayama, H., T. Nishino, K. Ueda, S. Takeno and H. Fujita, Surface wave excitation Auger electron spectroscopy of Si(001) reconstructed surfaces 39 (1991) 329
Nishino, T., see Nakayama 39 (1991) 329

Oh, M.H., see Inui 39 (1991) 268
Ohashi, T., see Saka 39 (1991) 110
Ohboshi, T., see Matsumura 39 (1991) 65
Ohnuki, S., Y. Hidaka and H. Takahashi, In-situ observation of defect cluster formation in metal and alloy under electron/ion dual-beam irradiation 39 (1991) 197
Ohsuna, T., see Terasaki 39 (1991) 238
Ohtsuka, I., see Saka 39 (1991) 110
Oikawa, T., see Shindo 39 (1991) 50
Okabayashi, H., A. Tanikawa, H. Mori and H. Fujita, HVEM observations of stress-induced voiding in Al lines for LSI 39 (1991) 306
Oki, K., see Matsumura 39 (1991) 65
Oku, T., see Shindo 39 (1991) 50
Oshima, R. and G.C. Hua, Characterization of Czochralski Si crystals by HVEM 39 (1991) 160

Phillipp, F., see Seeger 39 (1991) 32
Phillipp, F., see Seeger 39 (1991) 342

Saka, H., see Kuroda 39 (1991) 58
Saka, H. and H. Teshima, Recent progress in in-situ deformation experiments in HVEM 39 (1991) 81
Saka, H., K. Sasaki, T. Ohashi, I. Ohtsuka, T. Kamino and M. Tomita, In situ observations of solid–liquid interfaces 39 (1991) 110
Sakata, T., see Yasuda 39 (1991) 321
Sasaki, J., see Nagakura 39 (1991) 254
Sasaki, K., see Saka 39 (1991) 110
Sato, A., see Suzuki 39 (1991) 92
Savage, T.S., see Ai 39 (1991) 387

Seeger, A. and F. Phillipp, High-voltage electron microscopy in the Federal Republic of Germany: past, present and future 39 (1991) 32
Seeger, A., N.Y. Jin, F. Phillipp and M. Zaiser, The study of self-organization processes in crystals by high-voltage electron microscopy 39 (1991) 342
Shimizu, K., see Nakata 39 (1991) 72
Shindo, D., K. Hiraga, T. Oku and T. Oikawa, Quantification in high-resolution electron microscopy with the imaging plate 39 (1991) 50
Shinohara, K., see Kinoshita 39 (1991) 205
Shiraishi, H., see Suzuki 39 (1991) 92
Smith, D.A., see Allen 39 (1991) 222
Suehara, S., see Matsui 39 (1991) 8
Suehara, S., see Horiuchi 39 (1991) 231
Sumida, N. and K. Ikeda, Cross-sectional observations of gold–silicon reaction on silicon substrate in situ in the high-voltage electron microscope 39 (1991) 313
Suzuki, M., A. Fujimura, A. Sato, J. Nagakawa, N. Yamamoto and H. Shiraishi, In situ deformation of proton-irradiated metals 39 (1991) 92

Tadaki, T., see Nakata 39 (1991) 72
Tagami, M., see Inoko 39 (1991) 118
Takahashi, H., see Ohnuki 39 (1991) 197
Takaoka, A., see Yoshida 39 (1991) 45
Takaoka, A. and K. Ura, Stereoscopic observation and determination of surface orientation of voids in stress-thermal-migrated-aluminum lines of LSI with UHVEM 39 (1991) 299
Takayanagi, K., see Mitome 39 (1991) 382
Takeda, S., M. Hirata, S. Muto, G.-C. Hua, K. Hiraga and M. Kiritani, HRTEM observation of electron-irradiation-induced defects penetrating through a thin foil of germanium 39 (1991) 180
Takeno, S., see Nakayama 39 (1991) 329
Tanaka, N., K. Kimoto and K. Mihama, Observations by HVEM of atomic clusteres embedded in MgO crystals 39 (1991) 395
Tanikawa, A., see Okabayashi 39 (1991) 306
Tanino, M., see Hanamura 39 (1991) 86
Terasaki, O., T. Ohsuna, V. Alfredsson, J.-O. Bovin, D. Watanabe and K. Tsuno, The study of zeolites by HVHREM 39 (1991) 238
Teshima, H., see Saka 39 (1991) 81
Tomita, M., see Saka 39 (1991) 110
Tomokiyo, Y., see Matsumura 39 (1991) 65
Tomokiyo, Y., T. Kuroiwa and C. Kinoshita, Defects occurring at or near surfaces in α-Al_2O_3 during electron irradiation 39 (1991) 213
Tsuno, K., see Terasaki 39 (1991) 238

Ueda, K., see Nakayama 39 (1991) 329
Uemori, R., see Hanamura 39 (1991) 86
Ura, K., see Fujita 39 (1991) xiii
Ura, K., Design concept of a new ultra-high-voltage electron microscope at Osaka University 39 (1991) 1
Ura, K., see Yoshida 39 (1991) 45
Ura, K., see Takaoka 39 (1991) 299
Uyeda, N., see Isoda 39 (1991) 247

Van Landuyt, J., The evolution of HVEM application in Antwerp 39 (1991) 287

Wakai, E., see Ezawa 39 (1991) 187
Watanabe, D., see Terasaki 39 (1991) 238
Wu, X.J., see Horiuchi 39 (1991) 231

Yamaguchi, M., see Inui 39 (1991) 268
Yamamoto, N., see Suzuki 39 (1991) 92
Yasuda, H., T. Sakata and H. Mori, Structural and valence electronic analysis of electron-irradiation-induced foreign-atom implantation by a combination of UHVEM and AES 39 (1991) 321
Yokoi, N., see Kuroda 39 (1991) 58
Yokota, Y., see Hashimoto 39 (1991) 171
Yokoyama, M., see Matsui 39 (1991) 8
Yokoyama, M., see Horiuchi 39 (1991) 231
Yoshida, K., A. Takaoka, K. Ura, T. Katsuta and I. Matsui, Grooved fluorescent plate for parallel-detection electron energy loss spectroscopy in ultra-high-voltage electron microscopy 39 (1991) 45
Yoshikawa, T., see Inoko 39 (1991) 118

Zaiser, M., see Seeger 39 (1991) 342
Zhang, J.P., see Ai 39 (1991) 387

Ultramicroscopy 39 (1991) 406–408
North-Holland

ultramicroscopy

Subject index to volume 39

Analytical microscopy

Quantification in high-resolution electron microscopy with the imaging plate, *Shindo, Hirage, Oku and Oikawa* 39 (1991) 50

Evaluation of accuracy in the ALCHEMI method, *Nakata, Tadaki and Shimizu* 39 (1991) 72

Cross-sectional observations of gold–silicon reaction on silicon substrate in situ in the high-voltage electron microscope, *Sumida and Ikeda* 39 (1991) 313

Structural and valence electronic analysis of electron-irradiation-induced foreign-atom implantation by a combination of UHVEM and AES, *Yasuda, Sakata and Mori* 39 (1991) 321

Surface wave excitation Auger electron spectroscopy of Si(001) reconstructed surfaces, *Nakayama, Nishino, Ueda, Takeno and Fujita* 39 (1991) 329

Detectors, photographic and other

Grooved fluorescent plate for parallel-detection electron energy loss spectroscopy in ultra-high-voltage electron microscopy, *Yoshida, Takaoka, Ura, Katsuta and Matsui* 39 (1991) 45

Quantification in high-resolution electron microscopy with the imaging plate, *Shindo, Hiraga, Oku and Oikawa* 39 (1991) 50

Diffraction and optical diffraction

Convergent beam electron diffraction in the high-voltage electron microscope with continuously variable reference voltage for lenses and alignments, *Kuroda, Morita, Arai, Yokoi and Saka* 39 (1991) 58

High-voltage electron diffraction study of structure factors of Pd and Pt, *Matsumura, Ohboshi, Oki and Tomokiyo* 39 (1991) 65

Electron energy loss spectroscopy

Grooved fluorescent plate for parallel-detection electron energy loss spectroscopy in ultra-high-voltage electron microscopy, *Yoshida, Takaoka, Ura, Katsuta and Matsui* 39 (1991) 45

High resolution

Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. I. Instrumentation, *Matsui, Horiuchi, Bando, Kitami, Yokoyama, Suehara, Matsui and Katsuta* 39 (1991) 8

Quantification in high-resolution electron microscopy with the imaging plate, *Shindo, Hiraga, Oku and Oikawa* 39 (1991) 50

Observations on quick fluctuation of atom images of Si crystal lattice under 800 kV electron irradiation, *Hashimoto, Makita, Yokota, Ikuta, Hashimoto and Hetherington* 39 (1991) 171

HRTEM observation of electron-irradiation-induced defects penetrating through a thin foil of germanium, *Takeda, Hirata, Muto, Hua, Hiraga and Kiritani* 39 (1991) 180

Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. II. Applications to materials, *Horiuchi, Matsui, Kitami, Yokoyama, Suehara, Wu, Matsui and Katsuta* 39 (1991) 231

The study of zeolites by HVHREM, *Terasaki, Ohsuna, Alfredsson, Bovin, Watanabe and Tsuno* 39 (1991) 238

Degradation of the high-T_c superconductor $YBa_2Cu_3O_{7-y}$ studied by high-resolution electron microscopy, *Nagakura, Hirotsu, Sasaki, Miyagawa, Nakamura and Brito* 39 (1991) 254

High-resolution electron microscope study of lamellar boundaries in Ti-rich TiAl polysynthetically twinned crystals, *Inui, Nakamura, Oh and Yamaguchi* 39 (1991) 268

HREM study of disclinations in MgCd ordered alloy, *Kitano and Kifune* 39 (1991) 279

UHV microscopy of surfaces, *Ai, Buckett, Dunn, Savage, Zhang and Marks* 39 (1991) 387

High voltage

Design concept of a new ultra-high-voltage electron microscope at Osaka University, *Ura* 39 (1991) 1

Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. I. Instrumentation, *Matsui, Horiuchi, Bando, Kitami, Yokoyama, Suehara, Matsui and Katsuta* 39 (1991) 8

Elsevier Science Publishers B.V.

Recent evolution of HVEM in France, *Jouffrey* 39 (1991) 21
High-voltage electron microscopy in the Federal Republic of Germany: past, present and future, *Seeger and Phillipp* 39 (1991) 32
Grooved fluorescent plate for parallel-detection electron energy loss spectroscopy in ultra-high-voltage electron microscopy, *Yoshida, Takaoka, Ura, Katsuta and Matsui* 39 (1991) 45
Convergent beam electron diffraction in the high-voltage electron microscope with continuously variable reference voltage for lenses and alignments, *Kuroda, Morita, Arai, Yokoi and Saka* 39 (1991) 58
High-voltage electron diffraction study of structure factors of Pd and Pt, *Matsumura, Ohboshi, Oki and Tomokiyo* 39 (1991) 65
Recent progress in in-situ deformation experiments in HVEM, *Saka and Teshima* 39 (1991) 81
Some aspects of HVEM in the study of materials, *Goringe* 39 (1991) 100
History, present status and future of the contribution of high-voltage electron microscopy to the study of radiation damage and defects in solids, *Kiritani* 39 (1991) 135
Characterization of Czochralski Si crystals by HVEM, *Oshima and Hua* 39 (1991) 160
Observations on quick fluctuation of atom images of Si crystal lattice under 800 kV electron irradiation, *Hashimoto, Makita, Yokota, Ikuta, Hashimoto and Hetherington* 39 (1991) 171
Radiation-induced solute segregation in Al and Ni binary alloys under HVEM irradiation, *Ezawa and Wakai* 39 (1991) 187
Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. II. Applications to materials, *Horiuchi, Matsui, Kitami, Yokoyama, Suehara, Wu, Matsui and Katsuta* 39 (1991) 231
The study of zeolites by HVHREM, *Terasaki, Ohsuna, Alfredsson, Bovin, Watanabe and Tsuno* 39 (1991) 238
A new 1000 kV HREM for organic crystal study, *Isoda, Moriguchi, Kurata, Kobayashi and Uyeda* 39 (1991) 247
The evolution of HVEM application in Antwerp, *Van Landuyt* 39 (1991) 287
Stereoscopic observation and determination of surface orientation of voids in stress-thermal-migrated-aluminum lines of LSI with UHVEM, *Takaoka and Ura* 39 (1991) 299
HVEM observations of stress-induced voiding in Al lines for LSI, *Okabayashi, Tanikawa, Mori and Fujita* 39 (1991) 306
Cross-sectional observations of gold–silicon reaction on silicon substrate in situ in the high-voltage electron microscope, *Sumida and Ikeda* 39 (1991) 313
The study of self-organization processes in crystals by high-voltage electron microscopy, *Seeger, Jin, Phillipp and Zaiser* 39 (1991) 342
Formation of non-equilibrium solid phases by high-energy electron irradiation, *Mori and Fujita* 39 (1991) 355
A study of amorphization and microstructural evolution of graphite under electron or ion irradiation, *Nakai, Kinoshita and Matsunaga* 39 (1991) 361
Atom clusters – new applications of high-voltage electron microscopy "micro-laboratory" to materials science, *Fujita* 39 (1991) 369
Observations by HVEM of atomic clusters embedded in MgO crystals, *Tanaka, Kimoto and Mihama* 39 (1991) 395

Historical

Recent evolution of HVEM in France, *Jouffrey* 39 (1991) 21
High-voltage electron microscopy in the Federal Republic of Germany: past, present and future, *Seeger and Phillipp* 39 (1991) 32
The evolution of HVEM application in Antwerp, *Van Landuyt* 39 (1991) 287

Instrumentation

Design concept of a new ultra-high-voltage electron microscope at Osaka University, *Ura* 39 (1991) 1
Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. I. Instrumentation, *Matsui, Horiuchi, Bando, Kitami, Yokoyama, Suehara, Matsui and Katsuta* 39 (1991) 8
Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. II. Applications to materials, *Horiuchi, Matsui, Kitami, Yokoyama, Suehara, Wu, Matsui and Katsuta* 39 (1991) 231
A new 1000 kV HREM for organic crystal study, *Isoda, Moriguchi, Kurata, Kobayashi and Uyeda* 39 (1991) 247

Methods and techniques

In situ deformation of proton-irradiated metals, *Suzuki, Fujimura, Sato, Nagakawa, Yamamoto and Shiraishi* 39 (1991) 92
In situ investigations of plastic deformation and pseudo-elasticity of zirconia ceramics, *Komatsu and Fujita* 39 (1991) 105

New developments

Design concept of a new ultra-high-voltage electron microscope at Osaka University, *Ura* 39 (1991) 1

Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. I. Instrumentation, *Matsui, Horiuchi, Bando, Kitami, Yokoyama, Suehara, Matsui and Katsata* 39 (1991) 8

Convergent beam electron diffraction in the high-voltage electron microscope with continuously variable reference voltage for lenses and alignments, *Kuroda, Morita, Arai, Yokoi and Saka* 39 (1991) 58

Recent progress in in-situ deformation experiments in HVEM, *Saka and Teshima* 39 (1991) 81

Ultra-high-resolution HVEM (H-1500) newly constructed at NIRIM. II. Applications to materials, *Horiuchi, Matsui, Kitami, Yokoyama, Suehara, Wu, Matsui and Katsuta* 39 (1991) 231

A new 1000 kV HREM for organic crystal study, *Isoda, Moriguchi, Kurata, Kobayashi and Uyeda* 39 (1991) 247

Atom clusters – new applications of high-voltage electron microscopy "micro-laboratory" to materials science, *Fujita* 39 (1991) 369

Radiation damage and contamination

In situ deformation of proton-irradiated metals, *Suzuki, Fujimura, Sato, Nagakawa, Yamamoto and Shiraishi* 39 (1991) 92

History, present status and future of the contribution of high-voltage electron microscopy to the study of radiation damage and defects in solids, *Kiritani* 39 (1991) 135

HRTEM observation of electron-irradiation-induced defects penetrating through a thin foil of germanium, *Takeda, Hirata, Muto, Hua, Hiraga and Kiritani* 39 (1991) 180

Radiation-induced solute segregation in Al and Ni binary alloys under HVEM irradiation, *Ezawa and Wakai* 39 (1991) 187

In-situ observation of defect cluster formation in metal and alloy under electron/ion dual-beam irradiation, *Ohnuki, Hidaka and Takahashi* 39 (1991) 197

Accumulation and annihilation processes of cascades in metallic and nonmetallic crystals under irradiation with ions and/or electrons, *Kinoshita, Abe, Fukumoto, Nakai and Shinohara* 39 (1991) 205

Defects occurring at or near surfaces in α-Al_2O_3 during electron irradiation, *Tomokiyo, Kuroiwa and Kinoshita* 39 (1991) 213

In situ study of effects of ion irradiation on solid-state crystallization of cobalt disilicide thin films, *Allen and Smith* 39 (1991) 222

Degradation of the high-T_c superconductor $YBa_2Cu_3O_{7-y}$ studied by high-resolution electron microscopy, *Nagakura, Hirotsu, Sasaki, Miyagawa, Nakamura and Brito* 39 (1991) 254

HVEM observations of stress-induced voiding in Al lines for LSI, *Okabayashi, Tanikawa, Mori and Fujita* 39 (1991) 306

Structural and valence electronic analysis of electron-irradiation-induced foreign-atom implantation by a combination of UHVEM and AES, *Yasuda, Sakata and Mori* 39 (1991) 321

The study of self-organization processes in crystals by high-voltage electron microscopy, *Seeger, Jin, Phillipp and Zaiser* 39 (1991) 342

Formation of non-equilibrium solid phases by high-energy electron irradiation, *Mori and Fujita* 39 (1991) 355

A study of amorphization and microstructural evolution of graphite under electron or ion irradiation, *Nakai, Kinoshita and Matsunaga* 39 (1991) 361

Surfaces, clusters, interfaces and particles

Dynamic observation of dislocation movement across twin boundaries in the lamellar structure of TiAl intermetallic compound, *Hanamura, Uemori, Tanino and Morikawa* 39 (1991) 86

In situ observations of solid–liquid interfaces, *Saka, Sasaki, Ohashi, Ohtsuka, Kamino and Tomita* 39 (1991) 110

Grain boundary premelting in thin foils of deformed copper bicrystals, *Inoko, Hama, Tagami and Yoshikawa* 39 (1991) 118

Aluminum/ceramic interface structure and its related properties, *Naka* 39 (1991) 128

High-resolution electron microscope study of lamellar boundaries in Ti-rich TiAl polysynthetically twinned crystals, *Inui, Nakamura, Oh and Yamaguchi* 39 (1991) 268

Stereoscopic observation and determination of surface orientation of voids in stress-thermal-migrated-aluminum lines of LSI with UHVEM, *Takaoka and Ura* 39 (1991) 299

Surface wave excitation Auger electron spectroscopy of Si(001) reconstructed surfaces, *Nakayama, Nishino, Ueda, Takeno and Fujita* 39 (1991) 329

Atom clusters – new applications of high-voltage electron microscopy "micro-laboratory" to materials science, *Fujita* 39 (1991) 369

Anomalous surface structure of fine germanium particles, *Mitome and Takayanagi* 39 (1991) 382

UHV microscopy of surfaces, *Ai, Buckett, Dunn, Savage, Zhang and Marks* 39 (1991) 387

Observations by HVEM of atomic clusters embedded in MgO crystals, *Tanaka, Kimoto and Mihama* 39 (1991) 395